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ABSTRACT

Research was conducted in four schools of education to determine if there was any relationship between the degree of faculty involvement in program development and a systematic approach to change that involves a concern for the whole organizational structure rather than its constituent parts. The following internal factors were found in institutions with staff most involved with program development: (1) a strong sense of ownership and personal commitment for the institutional mission on the part of the faculty; (2) active staff involvement in needs assessment; (3) a high level of faculty involvement in decision making; (4) congenial professional and personal staff relations; (5) strong staff motivation; and (6) cooperative, democratic leadership. To a lesser degree, external influences seen to foster change in program development included court rulings, legislative action, and professional organizations. Factors that appeared to have little effect on faculty involvement in program development were identified as the central school administration, accrediting agencies, state certification requirements, finances, and school facilities. (JD)

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# A Systematic Approach to the Management of Program Development in Teacher Education

## Introduction

The history of teacher education in the United States attests to the fact that significant changes have occurred over recent decades. It was only a short time ago that the practice of self-taught teachers taking an examination for certification gave way to the requirements that all teachers attend a two-year program in a normal school. Teacher training was soon to be introduced to universities and normal schools grew to four-year colleges. Graduate programs in education followed on the heels of four-year programs and greater specialization emerged as teacher educators sought acceptance in the academic community. The bulk of these changes took place in the space of only a few decades immediately prior to World War II.

During the early stages of teacher education, program developments and the structure of the system were, for the most part, keeping abreast with the mainstream of society. Change was taking place in teacher education within a cultural comfort zone in which movement of society and the cultural lag found in the institution, or educational establishment, were not at a stage of major incongruence or level of incompatability. However, at approximately the midpoint of the current century, technological and social changes in our society had been taking place at such an accelerated rate that it was found various social institutions, education being one, had been pushed into a position in which an ever widening cultural lag was

being witnessed. Although teacher education in its present form is historically new in the realm of higher education, it has as an institution demonstrated an affinity for the acceptance of institutionalization and a resistance to modifications or change.

The quest for excellence implies a need for modifications in teacher education. Some may search for excellence in existing programs and, like the Holy Grail, find it in the very heart of the existing establishment. However, in a cybernated and pluralistic culture, it is doubtful that the argument for maintaining teacher education programs in their present form can be totally justified. Change in education is demanded by our times as has been reflected in the legislative and judicial branches of our government. Legislators and judges have assumed the role once occupied by educational leaders and philosophers in setting national policy in education. Consequently, changes have been introduced in teacher education programs in response to legislative and judicial demands. A rationale can be built, however, to suggest that teacher educators should assume more active leadership in planning program changes built on a sound philosophical base which adheres to defensible learning theory and accommodates identifiable and measured needs. To achieve improvements in teacher education, members of the profession may move forward in the accomplishment of their task with more efficiency and with sounder, more positive results if there is a greater understanding and thoughtful application of the change process.

Purpose

This paper reports the results of research which was conducted to

examine program development in teacher education as viewed through a composite, systematic educational change process which took into consideration both internal and external forces considered to have a potential impact upon changes in teacher education. The research report in this paper was conducted to determine if there was any observable relationship between the degree of involvement in program development found in a teacher education program and the utilization of a structured process for bringing about program improvement.

Research Methodology.

This research, conducted by Brandt and Haney, [1, 2] utilized a modified ethnographic approach for data collection which employed the following steps:

1. The literature was reviewed pertaining to the change process and encompassed materials from the disciplines of anthropology, sociology, agriculture, medicine, education and industry. From this review of literature, a base was derived from which a composite change model was identified. The compositve change model, which encompassed a systems approach, constituted the construct from which data collection instruments and techniques were derived.
2. A survey was conducted to identify teacher training programs with relatively high levels of involvement in program development efforts, or change, and institutions in which there was a low level of involvement in program development. A state college and a university in which there were reportedly high levels of program development were chosen to be involved in the investigation. In like manner, a university and state college that, according to the survey were minimally involved in program development, were chosen to be included in the study. Permission to gather information was acquired from teacher educators in the four selected institutions.

3. An interview schedule was developed, based on the composite, systematic change process derived from the literature. The structure of the interview embodied internal and external factors which were to be explored to see if faculty perceived a relationship or influence that related to program development in teacher education programs in the selected institutions. The instrument was piloted in two institutions of higher education.
4. Each staff member in the four selected institutions was contacted and appointments set for conducting the interviews during the spring of 1980. On scheduled dates, all interviews were, with the permission of the interviewee, taped and later transcribed for analysis. The two primary investigators conducted the interviews and made notes regarding reactions of interviewees on a structured form to accompany the tapes.

Table 1

Staff Size and Number of Interviews
in Selected Teacher Training Programs

| Institutions | Staff Size | Number Interviewed |
|---|---|---|
| Alpha University | 98 | 26 |
| Beta University | 49 | 13 |
| Delta State College | 75 | 26 |
| Gamma State College | 51 | 18 |

5. Data analysis involved transcribing each interview tape in its entirety. Each investigator then drew from each transcription responses that pertained to either selected external factors (Brandt) or selected internal factors (Haney) related to the composite, systematic educational change process employed in this investigation. An ethnographic mapping technique was em-

ployed to categorize and analyze responses received from interviewees. Patterns were sought from individual interviewee responses which could be identified with the process of program development in the four selected institutions. The case study approach was then employed to describe the program development process as perceived by faculty members in their respective institutions.

## Review of Related Literature

The literature dealing with the change process has grown in recent years so that various models for change are available as guides in managing programs for the improvement of teacher education. While much must be learned about the management of planned change, there is sufficient knowledge compiled to be of benefit in working within an institutional structure in accomplishing program improvement.

Early efforts to explain how change took place came from disciplines outside the field of education. Perhaps the oldest of the change research tradition was found in the work of anthropologists who placed an emphasis on change in values as a culture was confronted with an innovation. However, there was a general lack of attention given to process until the work of Barnett gave further clarification to much of the definitions and terminology and he identified and described the stages of readiness, or the antecedents, to change.[3] Barnett's work along with others[4] emphasized the role of culture in selective borrowing of innovations and was later tested in agriculture by Lionberger[5] and in medicine by Menzel.[6] Early anthropological studies of the various elements of change may be credited with making a major contribution to the field of knowledge.

As sociologists examined the changes taking place in our society, new dimensions were added to the knowledge base. Trade developed a theory of geometrical progression regarding the acceptance of an innovation, which later became a part of the foundation for studies regarding innovation in agriculture, medicine and education.[7,8,9,10] The normal S-shaped curve of adoption theorized by Trade, over time, has been affirmed and described as "... a slow advance in the beginning, followed by rapid and uniformly accelerated progress, followed again by progress that continues to slacken until it finally stops."[11] Research on time for adoption was one more advancement in the total understanding of the change process.

The definition and importance of opinion leaders also emerged from the field of sociology, as did information relating frequency of change to population density. Bowers suggested "diffusion tends to reach the largest cities first and then proceeds to their tributary smaller cities."[12] Larger communities tended to rely on mass media while in smaller communities a more intimate, personal communication pattern existed.

Studies in agriculture of diffusion and adoption of hybrid seed corn demonstrated much of the applicability of prior work and provided still more information about process. Sources of information that contributed to the acceptance of an innovation were explored.[13, 14] From studies done by Rogers the model for change in agriculture was defined, clarified and ultimately became a part of the base for change studies in both medicine and education.[15]

As change in agriculture continued to be examined, various studies related to education were conducted in which the knowledge base from other disciplines was tapped. The influence of opinion leaders was examined as was the role of the extension agent and the agricultural researcher or scientist.[16, 17, 18] Through the decade of the 1950s scholars studying the innovation and adoption process, as it was taking place in American agriculture, were adding significantly to that which was known about how change took place.

In the field of medicine, studies of innovation dealt with the areas of physician acceptance of innovation and the acceptance of health innovations by the public. For the latter, the three most extensively researched areas were Salk polio vaccine, water fluoridation and family planning. Physician acceptance of innovation centered around concepts involving opinion leaders and communication patterns.[19, 20] The importance of personal contact emerged as well as an awareness of the influence of representatives from the drug industry.[21] From the various studies of innovation and diffusion in the area of medicine emerged the medical model for change.

It was only natural that studies of the change process in education emerge and that the knowledge accumulated in other fields would be drawn upon. There was a series of studies that focused attention upon the amount of time involved, or the development of the S-curve theory, in the adoption of innovations in education,[22, 23, 24] Attention was soon to be directed at the conceptualization of change models for education and an examination of the various components or elements which composed such models.

Divergent views have developed regarding the process of change in the field of education. The multiplicity of views or perceptions of how change is affected in education, as contrasted to agriculture or medicine, is brought about by the fact that the "innovator" in an educational setting may in some instances be involved in the adoption of a product that had been previously tested, while in other instances there may have been a process for the development of a program modification. In the case of an adoption of a pre-tested product, a change model with much in common to the agricultural model may be appropriate. A change model with significant variations may be more appropriate for bringing about educational change when it involves a process for designing, implementing and evaluating a program for the improvement of education.

Summary of Various Educational Change Models

Various change models have been suggested for education which include (1) Research, Development and Diffusion, (2) Problem-Solving and (3) Social Interaction. [25] Briefly, a basic description of these paradigms follows:

Research, Development and Diffusion (R,D & D). Emphasis was placed on the origin of the innovation: the developer, not the user. The assumption was made that there were experts who were the developers of the innovation. Several works which contributed to the R, D & D models were completed in education by Brickell, [26] Miles, [27] Heathers, [28] Guba and Clark, [29] and Stiles and Robinson. [30] Parallel R, D & D models were also developed in industry by Havelock and Benne, [31] in anthropology by Gallagher, [32] and in sociology by Meyerson and Katz. [33] The primary focus of each of these

models was the development of an innovation, with less emphasis placed on application or evaluation.

Assumptions and characteristics of the R, D & D models were listed by Havelock. First, there was a rational sequence of activities which moved from research to development to packaging before dissemination took place. Second, planning was conducted on a massive scale which produced coordination and a relationship between research and development. Third, there was a division of labor and a separation of roles and functions. Fourth, there was a specified passive consumer, who, once appropriately introduced to the innovation, was willing to accept it. Finally, these models suggest the acceptance of high initial development costs prior to dissemination.[34]

The Problem-Solving (P-S) models, unlike the R, D & D models which emphasized the development of the innovation, were concerned with the user of the innovation. The user individually sought solutions or relied upon an outside source. The individual who assisted with the solution was referred to as the change agent. Before the solution could be effective, it was mandatory that the receiver realized the need and participated in the process. The Problem-Solving models were concerned with the elements of individual and group attitudes, interpersonal relations, and communication systems.

A common model among the problem-solving theorists was that of Lippit, Watson and Westley. Their model expanded upon and modified previous work in the area as they developed a seven phase process model which included:

Phase 1: The client system discovers the need for help, sometimes with stimulation by the change agent.
Phase 2: The helping relationship is established between user and agent and defined.
Phase 3: The client's problem is identified and clarified.
Phase 4: Alternative possibilities for change are examined; change goals or intentions are established.
Phase 5: Change efforts in the "reality situation" are attempted.
Phase 6: Change is generalized and stabilized.
Phase 7: The helping relationship ends or a different type of relationship is defined.[35]

Social Interaction (S-I). This model was concerned with the social interaction or communication of the adopting group. One was not concerned with the durability or to what extent the adoption had occurred. Focus was on the individual's perception of and response to knowledge. A widely used S-I model was developed by Rogers in his extensive 1962 study. The phases identified in the change process were: (1) awareness, (2) interest, (3) evaluation, (4) trial and (5) adoption.[36] Carlson extended the information developed by Rogers and explored its implications for the field of education as it related to knowledge provided by sociologists regarding opinion leaders.[37]

Previous authors have suggested the need for a synthesis of change models. Havelock alluded to a combination of change perspectives as "the concept of 'linkage' as a possible unifying and integrating idea."[38] Hall viewed change as an innovation-adoption cycle. This cycle consisted of extended periods of "relative calm and tranquility," considered to be equilibrium, which were followed by disequilibrium and "relatively short periods of intense innovative activity and disruption."[39] It was for the disequilibrium stage that Hall developed the Concerns Based Adoption Model (CBAM). The CBAM considered the stages of change as well

as the social interaction or communication of the adoption group. This interrelationship was an attempt to integrate the Problem-Solving models and the Social-Interaction models.

Composite, Systematic Educational Change Process

For the purpose of conducting this research, a change model or process was developed which synthesized and integrated elements of previous models with the systems approach. Integrally associated with this proposed change process were considerations of internal and external forces at play in the institution in which the nature of the change process was being examined. The Composite, Systematic Educational Change Process utilized for this research is presented in Figure 1.

There are three components which constitute the initial phase of the process which involve the analysis of the setting and the cultural climate, needs assessments and finally the basic philosophy and learning theory upon which program improvements may be designed. It is these considerations upon which the program foundation is conceptionalized. The quality of the conceptual foundation may ultimately influence the nature and internal consistency of the program to be designed.

The establishment of the basic mission and the fundamental purpose to be accomplished by an institution may be defined in more meaningful and practical terms, and ultimately provide a clearer focus and direction for the program improvement or the change process if they grow from a strong conceptual framework. The fundamental concepts and identifiable

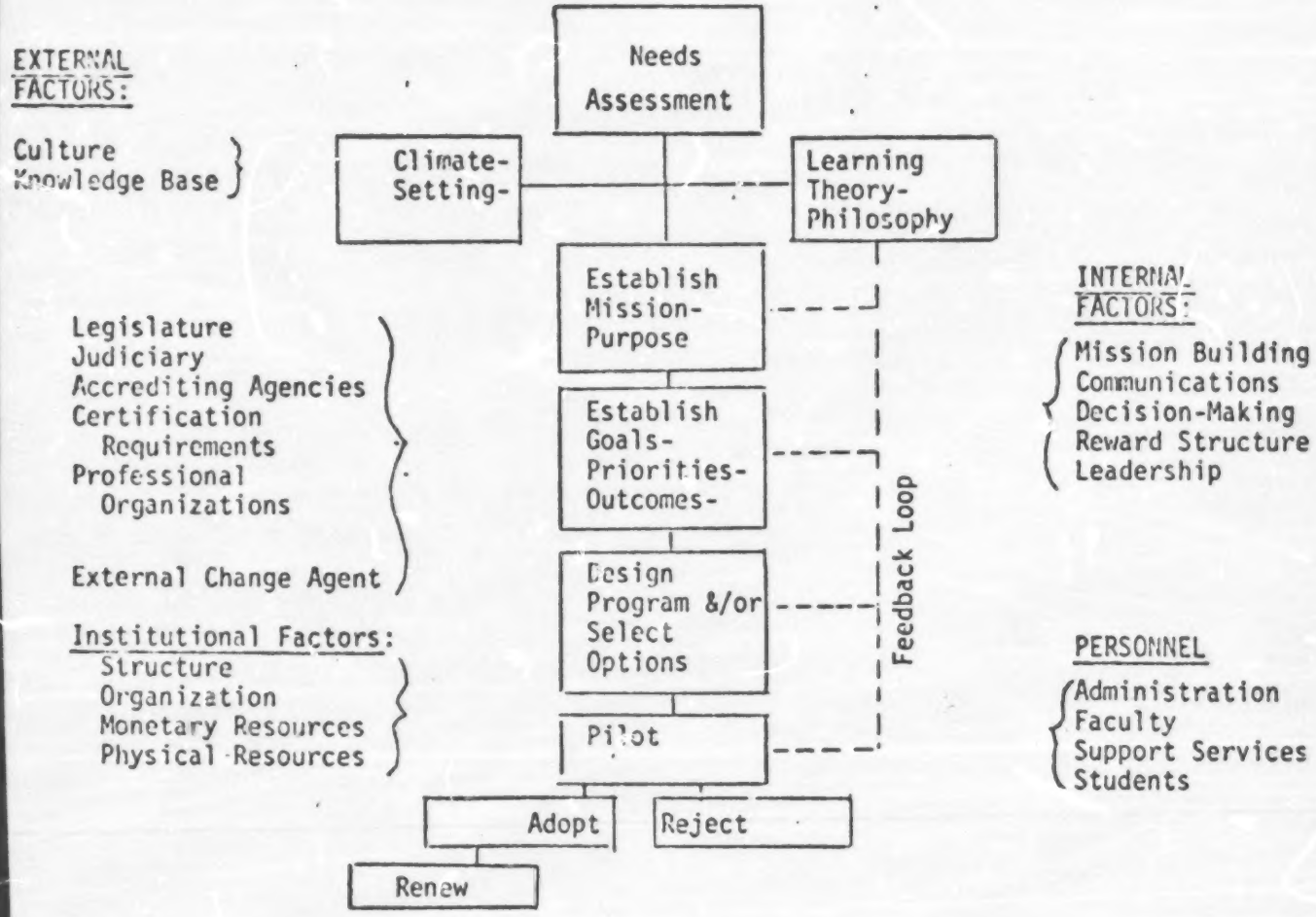


Figure 1

Composite, Systematic Educational Change Process

needs upon which a program for change is to be built, as well as the mission and purpose to be served by an institution, need to be derived from involved staff who develop, through the process, a sense of ownership accompanied by a clear understanding of the task to be accomplished.

The establishment of goals, priorities and measurable outcomes can follow the establishment and clarification of the institutional mission. The internal consistency of goals, priorities and measurable outcomes may be determined by reviewing them in light of fundamental assumptions and needs assessment data and the mission statement.

Program content, structure and methodology can be designed once goals, priorities and outcomes are specified. The content, structure and methodology of programs designed to improve the quality of teacher education can be assessed in terms of their consistency with mission and with the basic fundamental assumptions upon which the program was founded. It is at this stage of the Composite, Systematic Educational Change Process that it is possible to become involved with the adoption of a pre-tested product or with the designing of a program structured to meet a programmatic need. In the first instance, the Composite, Systematic Educational Change Process becomes an adoption model while in the latter instance it becomes a process for designing an innovation.

Testing the product that was adopted, or piloting the process designed for program improvement, is the next phase of the Composite, Systematic Educational Change Process. In theory, the data that are gathered in the testing or piloting stage should provide information for determining future considerations with respect to the adoption of the

pre-tested product or the implementation or rejection of the newly designed program or innovation. Assessment that follows the testing or piloting phase of the process is primarily summative in nature. Summative data should be supplemented by formative data gathered throughout the entire process from the first through the last phase of the entire process.

## Findings

The change process utilized in institutions highly involved in program development was substantially different than that of the less involved institutions. The internal factors related to change reflected a substantive difference in the areas of mission building, assessment, decision making, communication, motivation and leadership when contrasting staff responses in institutions highly involved with program development as compared to institutions where there was little involvement in program development.

### Internal Influences:

Mission Building. Staff members in institutions most highly involved with program development efforts clearly perceived the process of mission building in their institution. They verbalized a strong sense of ownership and personal commitment for the institutional mission and, at the same time, recognized and accepted a feeling of strong departmental ownership and autonomy. By contrast, staff members from institutions with minimal involvement in program development were unclear, vague or expressed contradictory views about the mission of

their institutions and the process by which that mission was derived.

A strong contrast was also found in the individual mission or personal goal statements of faculty. Staff members from institutions highly involved in program development described a multifaceted mission and focused, primarily, on the growth and development of students. Other elements defined as important included the pursuance of professional growth and power, service to education and the community, institutional and departmental governance, and grantsmanship. Faculty members of institutions with low involvement in program development consistently described individual mission in singular terms and a narrower scope. A major differentiation for the two groups of staff members was with respect to a lack of concern and involvement in service activities by those serving in institutions having a low level of program development.

Needs Assessment. Faculty members of institutions that were highly involved in program development valued efforts to assess needs; they focused on consistently improving efforts to gather data and the utilization of assessments to develop long-range plans. Improvement was perceived as a continual demand. In schools where minimal program development was occurring, personnel were most often satisfied with current programming and verbalized little or no need to improve. Short-term needs and immediate problem solutions were the primary focus. For the latter institutions of low involvement in program development, individual faculty members expressed little responsibility for contributing to a data-based assessment or the use of data-based planning for decision-making. While personnel from schools actively involved in program

development were more receptive to the concept and involved in needs assessment efforts, more than their counter-parts from institutions with minimal involvement, it appeared that needs assessment was one of the least employed or accepted components of the systematic change process used in this investigation.

Decision-Making. Noticeable differences existed among staff perceptions of the decision-making process in schools actively involved in program development as contrasted to schools where minimal program development was occurring. In schools where a high degree of program development was in evidence, there was a correspondingly high level of staff involvement in what could be described as an open decision-making process. These schools functioned in a democratic setting in which strong leadership was clearly in evidence. Risk and failure were accepted without fear of reprisal; trial and experimentation were specifically encouraged by administrators as part of program development responsibility. Ideas flowed openly in both directions between administrators and faculty, with program ideas most often being initiated by individuals at the departmental level or from faculty committees. Leadership was perceived as strongly supporting and positively directing program efforts.

In those schools with low levels of program involvement, the decision-making process was seldom clearly and completely understood by faculty members. Education trends were more the focus of program initiation than was the utilization of assessment data. Experimentation and pilot testing of programs were weak, with little perceived administrative

support. In those schools not highly involved with program development, decision-making was described in rigid procedural terms, without grasping the intricacies of a group process which afforded appropriate faculty involvement. Department lines and seniority were considered relatively sacred, and little cooperation was evidenced among the various schools or subdivisions within the institution.

Communication. School personnel where high levels of program development were in progress discerned effective, free-flowing communication as a paramount factor in the success of program development. The formal structures allowed for ample initiation and discussion opportunities and, since faculty members took an active role in decision-making, they perceived open communication as a valued asset. This was in stark contrast to those schools that lacked a program development thrust, where there existed interdepartmental antagonism, feelings of isolation and where there was found a single directional flow of communication from the administrative personnel to the staff.

The communication environment of those schools highly involved in program development can be additionally contrasted to those with low involvement, in that congenial professional and personal relationships existed in the first. Trust was high, with faculty members possessing a sensitivity to the capabilities, needs and drives of associates. There was pride in the outstanding talents and achievements of colleagues. This was contrasted to the lack of trust and openness which surfaced in schools lacking strong program development activities, often culminating in negative comments about persons and procedures. There was a lack of

expressed camaraderie, little voiced pride of colleagues, and an absence of teamwork in evidence in those institutions in which limited program development was found.

Motivation to be involved in program development was described on two different planes. The first was a commitment which existed within the individual faculty member--a driving force to achieve, create, meet challenges, improve the profession and society, help students and grow as a professional. The second plane was the acquisition of material rewards, specifically increased merit pay and salary, and increased status and recognition.

Educators associated with institutions highly involved in program development described a diverse and complex system of motivation. Their involvement in program development extended over both planes, but with less emphasis being placed upon material rewards and status; travel opportunities were singled out as important, especially for individual growth and awareness. Educators associated with institutions having weak program involvement described motivation as existing almost exclusively on the second plane of material rewards, status and recognition.

Leadership in the institutions that were highly involved in program development was perceived by staff as "cooperative" and "democratic." Leaders were described, first, as facilitators who helped establish guidelines and provide motivation; second, they were seen as delegators who worked from the basis of knowing the strengths and weaknesses of individual faculty members, and then delegating accordingly; third, they were perceived as listeners of faculty ideas, plans and concerns. Finally, they

were considered developers of individuals in an advising and counseling manner. Also, the deans in these schools were seen as having a leadership role that reached out into the profession and the political system in the state.

Deans in schools with low levels of program development saw themselves and were perceived as decision makers who communicated the decisions to the faculty. The predominant focus was directed toward providing structure, information and controlling rewards. Behavior of deans in schools with low involvement in program development demonstrated a closed approach to communications and decision-making, with noticeable efforts to limit or control staff involvement.

External Influences:

Accreditation agencies were not perceived by faculty as having a great influence in any of the schools involved in this study. However, in schools where program development was in progress, accreditation agencies were viewed as a positive, helpful means to benefit from the perceptions of persons outside the institution. The guidelines of accreditation agencies served as a reference point for program development. The self-examination and accreditation process was perceived as a valuable activity. In schools not highly involved with program development, outside accreditation teams were seen as uninformed and of little or no positive value. Upon completion of an accreditation visitation, content was admittedly reshuffled to show evidence of program development. Faculty from one institution with a low level of involvement in program development felt "compelled to react." The

conclusion can be made that accreditation agencies were not a direct factor affecting program development. Accreditation agencies benefited institutions indirectly by providing a reference point when considering program development and opportunities for faculty members to examine their program.

State certification requirements were not perceived as being either helpful or any problem by school personnel actively involved in program development. Faculty members from institutions actively involved in program development were participants in the development of certification standards. Due to their participation, state certification requirements were perceived as having little effect upon program development, since they saw their programs as leading the way for certification standards. Thus, faculty members involved in program development perceived their programs as being beyond certification minimums. In both institutions where little or no program development was under way, faculty members viewed state certification requirements as creating a reactionary posture in their institutions, and rather than accreditation standards fostering change in a positive way, such requirements were seen as forcing compliance.

Court decisions and legislation were seen in all institutions as having an influence in bringing about program development. Federal and state legislation influenced the funding for these institutions. Faculty members from institutions actively involved in program development were also involved in grant writing. Indirectly, this created an awareness and plan for program development. Legislation also passed certification rulings which indirectly affected an institution's program.

In actively involved schools, the perception of court decisions and legislation was generally positive, while in other schools, faculty members took a reactive posture to this external influence. In conclusion, legislation and court decisions did serve as a positive stimulus to program development.

Professional organizations were viewed by staff from all four institutions involved in the study as a positive stimulus for professional growth. Faculty members of the innovative institutions also listed the information received and opportunities for participation as mutually supportive of professional organizations and their own program effects. Professional organizations were seen by faculty members in all schools in the study as providing opportunities to exchange information. It was this stimuli which resulted in faculty members perceiving professional organizations as indirectly affecting program development. Professional organizations were also viewed as a positive factor, one which provided a stimulus for program development by faculty members in institutions with low program development activity. However, since program development was not occurring in these institutions, this perceived effect may be questioned.

Central administration was considered as having little or no effect on the degree of involvement in program development by faculty in all institutions involved in the study. This impact was perceived as being focused to check for consistency regarding the mission and goals of the institution. Second, central administration was perceived as establishing the procedure for program approval. This indirectly affected the

process for program development. The appropriation and authorization of resources by the central administration were also seen as an indirect effect upon program development. Staff members from institutions highly involved in program development saw this factor as having little effect, while in institutions not highly involved, staff members viewed central administration decisions as negatively affecting program development. In conclusion, central administration decisions were not viewed as direct factors in the change strategy for program development.

The structure and organization of the institution was not viewed as a helpful or as an inhibiting force in program development. The structure and organization of the institution provided the framework for the program development approval process. Departmental autonomy prevailed in all of the schools involved in this study. Differences within the structure and organization of the high- and low -involved schools existed. The institutions where staff were highly involved in program development not only allowed departmental autonomy, but encouraged faculty autonomy. Faculty initiative was encouraged and promoted through workshops, committee assignments, and by the administration. Although autonomy existed in the low program development institutions, faculty members of one school viewed the structure and organization of the institution as inhibiting program development. Faculty members perceived blocks in the approval and felt the administration determined the direction or extent the faculty would become involved in change.

The procedure for approval of proposed changes for program development was clearly defined by faculty members of the institutions where

there was high involvement of staff members in program development. Although the two schools of education where high levels of program development was in evidence had differed greatly in the number of steps involved, neither of the processes for approval was viewed by staff as inhibiting program development efforts. Faculty members were permitted ample opportunities for input. Their proficiency in moving through the procedure was aided by the identification of perceived "gate people."

In contrast, faculty members of the institutions where little program development was in progress were not as knowledgeable or proficient in their use of the approval process. An understanding of this procedure was not in evidence. Faculty members felt stifled by the requested conformance to the approval process. This perception perpetuated a lack of involvement in program development.

Finances were perceived by those involved in program development as having little or no effect on their efforts to foster change. Faculty members from both innovative institutions viewed finances as having neither a positive nor negative impact upon the change process. Of those involved in program development, faculty members cited the need to be innovative in acquiring resources. Staff from these institutions were highly involved in federal and state grants. As faculty members improved grantsmanship skills, finances were perceived as having less effect in the change process.

In institutions where there was little involvement in program development, staff members viewed finances as a limiting factor. Little external

funding existed in one of these institutions. The perception that finances had a negative impact upon program development tended to compound the rationale program changes could not be made. In another institution with little program development in evidence, there were efforts on the part of staff to acquire research grants. Staff rationalized this took so much time and effort that program development was at a low priority.

Facilities were not viewed in any consistent pattern as having a positive influence on program development. The physical resources of the institutions including space, facilities, computer services, library, help with research, secretarial assistance, and travel. Though dispersement of offices throughout an entire campus was perceived as inhibiting communication and interaction in one of the highly involved institutions, program development still occurred.

Faculty perceptions in the institutions with low involvement in program development differed in their view of space, facilities and support services. Faculty members of one such institution viewed space, limited facilities, computer services and travel as negatively affecting program development. In both institutions in which there were minimal levels of faculty involvement in change, staff members were primarily housed in one building, while the highly involved institutions' faculty members were officed in multiple units. Thus, space and facilities could not be identified as negatively affecting the program development process. Computer services, library, help with research, secretarial assistance and travel were not perceived as factors in relation to the change process.

In conclusion, space, facilities and support services had not affected the program development involvement.

Faculty workload was not seen as a hindrance in schools where staff members were highly involved in program development. The interviewees perceived program development as part of their responsibility. In schools where little or no program development was in progress, faculty members perceived their workload as an inhibitor and deterrent to program development. These faculty members viewed their workload as being so demanding little time existed for program development.

## Conclusions and Implications

Several conclusions may be drawn from the findings reported by Brandt and Haney. For those involved in the research, the striking differences, which were so clearly discernible between institutions where faculty members were actively involved in change or program development efforts as contrasted to faculty members in institutions in which little or no program development was in evidence, were not totally expected. Much of the information gathered through the interview process, which clearly distinguished differences among institutions, was not the kind of information found in the transcriptions of the actual interviews. The mood of faculty members, the levels of enthusiasm and openness, came into clear focus for the interviewers, revealing that in some institutions a positive climate prevailed, while in other institutions closed and negative responses dominated.

"Negative" was one of the key words to describe staff members in schools where little or no program development was evidenced. In one institution some staff members actually tried to avoid being interviewed. Staff members in institutions where little or no program development was being undertaken typically demonstrated two patterns of behavior. Some staff members were cautiously guarded in their comments and sought assurances regarding confidentiality as they gave numerous rationalizations to explain their behavior. Others insisted in "telling all" as they poured out their feelings and concerns about the trials and tribulations associated with their positions.

Enthusiasm and confidence were general reactions from most staff members where active efforts were found to launch program improvement efforts. Openness and respect for others were clearly in evidence as interviewees wanted to share information about themselves, others with whom they worked, their program and their institution. Institutional climate was not a formal part of this research, yet the data behind the data for this study convey poignant and telling information about the mood, or climate if you will, that existed in those institutions where staff members were highly involved with change as contrasted to those in institutions where low levels of change activity were found. In the institutions where change was taking place, staff members demonstrated a free and open pattern of communications and a high level of trust was exhibited among staff members and between staff members and administration.

Educators in schools where there was a high level of activity designed to foster program improvement followed the sequence of steps in

the Composite, Systematic Educational Change Process much more closely than did their counterparts in institutions where little or no change was occurring. Educational leaders working with involved staff members were able to manage the change process with much more skill than was demonstrated by persons in institutions where little or no program development was found. In this respect, it may be concluded the findings simply revealed that which was known, or rediscovered the obvious. However, the "obvious" may warrant a closer examination.

When reviewing the content of the interviews held with teacher educators involved in this study, a crude pattern emerges which suggests, in a preliminary way, which elements or forces seemed to be prevalent in settings where change was in process.

Positive leadership and administrative support were available. The quality of leadership permeated all other facets of the program, particularly with respect to motivation for staff members, working climate, communications and decision-making.

The elements of a change model were utilized, if not in total, at least in part by professionals responsible for program improvement.

Open communication, which flowed in two ways between staff members and administration and which flowed among staff members, was in evidence.

Decision-making was designed and operated with high levels of realistic staff involvement.

Rewards were aimed at satisfying internal and higher-order needs of staff than simply considering salary issues. Staff members felt involved and accepted assurances they were contributing in a worthwhile way and their contribution was respected and appreciated.

Staff attitudes and qualifications were projected to the inter-

viewers in a very positive mode.

Positive Climate, as observed and perceived informally, for support and constructive involvement was created or fostered by administrative personnel and by persons in staff positions.

Mission building and goal clarification were achieved by the staff members through a group decision process, with the end result that staff members understood the goals and generally felt an ownership for their goals.

Court rulings, legislative action and professional organizations were, to a much lesser degree, forces which fostered change or program improvement.

Each of the above items relates to other items. None is mutually exclusive. Most of the consortium of elements seen as fostering change are identified as internal forces. There is support in the findings of Brandt and Haney for much of what has been found in the literature in terms of educational change models, strategies and program management or leadership. It does seem to appear that persons responsible for teacher education need to be able to recognize and articulate the need for change, and as they become scholars of the change process, have the courage and conviction to go about the task of improving teacher education through a systematic approach, employing strategies and administrative process that call upon and implement what is known in the area of people skills. Knowing management and knowing change are not enough. Leaders in teacher education need to know how to create the climate in which change can take place by developing and capitalizing upon the most important resource in teacher education--the faculty.

Organization and structure are often perceived as the key to program development. Information gathered in this research suggests staff did

not see organization or structure as having a major impact on change. Actually, in one institution, in which there was a rather high level of activity associated with program improvement efforts and in which there was a lengthy and complex process for program approval, the staff members indicated the complex process had little or no deterring effect. The structure could have been viewed as an impediment, but the staff members indicated they knew the process and moved ahead with proposals. This would suggest that organization may have less impact than is often perceived. It further suggests outside forces (legislative or administrative), which dictate reorganizing the structure of a teacher education program, may not be generating a process for program improvement but may be causing disruptions, through the intervention process, ultimately yielding little or no programmatic benefits. Interventions aimed at reorganization may cause change in building directors but may fall short of affecting meaningful changes which reach the learners.

With respect to the possibility that the Brandt and Haney studies simply verified some well-known facts about the management of change, there remains a persistent pattern of questions. If the elements of a change model or process are obvious and the process is thoroughly understood, why is it that so many professionals who are responsible for engineering program improvements in the field of teacher education demonstrate behavior which ignores or rejects the use of a systematic approach to change? Or why is it that there is such an abundance of evidence that those who try to bring about change mismanage the process? For example, if mission building and clarification of goals were an obvious need in

ordering change, why are they so frequently avoided as being unimportant or too time-consuming to be practical? If the concept of designing goals and objectives which will move a program to closer realization of institutional purpose were so obvious, why is it that programs still exist for training teachers in which staff are unaware of goals and objectives? If the need for planned change for program improvement were obvious, why is it that in some institutions there is no demonstrable awareness of how to harness change strategies and planning efforts? If organization has minimal influence on program improvement efforts, why is it that those responsible for teacher education programs demonstrate a reliance upon outside interventions to force reorganization? In total, if the management of the change process were so obvious, why do we see so little change taking place in teacher education when the needs are so obvious?

There is much to learn about managing change, or program improvement, in teacher education. The quest for excellence demands that those persons responsible for teacher education programs move with forcefulness and purpose to the task of improving program of preparation for teachers. The task is overwhelming and it must be done in a complex setting. Educators need to become devout students and experimentors of the change process, building upon that which is known about the management of change, and as more knowledge is accumulated, reinvesting that knowledge so that further refinements can ultimately yield the results which will assure every child, youth or adult learner in our nation, the best possible learning experience.

## Footnotes

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